



# Radegen Biotechnology™

09/20/2023

## 2023.09.20 Project Skunkworks: T7, Taq, Tth, and ScriptII Polymerase Suite

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T7 Plus™ - A T7 RNA polymerase reagent

Tag+Start™ - A hot-start platinum upgrade to Taq with 2x better fidelity (1 error every 10,000kbp)

Tag Scribe RT qPCR - A one step RT qPCR hot start reagent

Tth+Start™ - A hot-start platinum equivalent to Taq with 2x better fidelity and RT function

II Scribe RT™ - Script II reverse transcriptase 2x reagent

Plus Start™ - A qPCR system title that includes the above enzymes and a T7 RNA polymerase reagent.

>S-Taq+Theta43

MHHHHHHSSGLVPRGSGMKETAAKFERQHNSPDLGTDDDKMATTVKFKYKGEEKEVDISKIKKKVWRVGKMSFTYDEGGGKTGRGAVERSEKDAPKELLQMLEQKKMRGMLPLFEPKGRVLLVDGHHLAYRTFHAKGLTTSRGEPVQAVYGFAK  
SLLKALKEDGDAIVVFDAKAPSFRHEAYGGYKAGRPTPEDFPRQLALIKEVLVDFLLGLARLEVPGYEADDVLSLAKKAEGEYEVRLTADKDLQQLSDRHVLPHEGLITPAWLPEKYLRRPQQNADYRALTGDESNLPGVKGIGEKTA  
KLLLEWSLEALLKLNDLKPAIREKILAHMDDLKLSWDLAKVRTDPLEVDFAKRREPDRERLRAFLERLEFGSLLHEFGLESPKALEAPWPPEGAFFGVFLSRKEPMADLLAALAAARGGRVIRAPEYKALRDKEARGLLAKDLSVLAL  
REGLLPPGDDPMILLAYLDPSNTTPPEGVARRYGEWEAERAELSERFLANLWGRLEEGNLWLYREVERPLSAVLAHMEATGVRLDVALRALSLEVAAEIRLEAEVFLRAGHPFNLSRDQLERVLFDELGLPAIGKTEKTGKRSTSAA  
VLEALREAHPIVEKILQYRELTKLKSTYDPLDLIHPRTGRHLTRFNQTTATGRLSSDPNLQNIIPVRTPLGORIRRAFTAEEGWLLVALDYSQIELRVL AHLSGDENLTRVFQEGRDXIETASWFMGPVRAEVDPLMRRAAKTINFGVLYGM  
SAHRLSQELAIPYEEAQAFIERYFQSFPKVRAWIEKTLEEGRRRGYVETLFGRRRYVPDLEARVKSVERAERMAFNMPVQGTAADLMKLMVKLFPRLREMARMILLQVHDELLEAPKERAEEVARLAKEVMEGVYPLAVPLEVEVGIGEDWLS  
AKE\*

>S-Tth+Theta43

MHHHHHHSSGLVPRGSGMKETAAKFERQHNSPDLGTDDDKMTLNIEDEHRLHETSKEPDVSLGSTWLSDFPQAWAETGGMGLAVRQAPLIPLKATSTPVSIKQYPMQSEARLGKIPHIQRLLDQGILVPCQSPWNTPLLPVKPKTNDRPV  
QDLREVNKRVEDIHPTVNPYNLLSLGLPPSHQWTDLKDAFFCLRLHPTSQPLFAFEWRDPEMGISQLWTRLPQGFKNSPTLFDEALHRDLADFRQHPLLQLQYVDDLLAATSEDCQCGQTRALLTQLGNLGYRASAKKAQICQKQVKY  
ASREGDLVPGDDPMILLAYLDPSNTTPPEGVARRYGEWEAHRALLSERLHRNLLKRLEGEKLLLWLYHEVEKPLSRVLAHMEATGVRLDVALQALSLEAAEIRRLEEVFLRAGHPFNLSRDQLERVLFDELRLPALGKTKTGRSTS  
AAVLEALREAHPIVEKILQHRELTKLKNTYDPLPSLVPHTPLGRHLTRFNQTTATGRLSSDPNLQNIIPVRTPLGORIRRAFTAEAGNVALDYSQIELRVL AHLSGDENLTRVFQEGKDIHTQTASWFMGPVPEAVDPLMRRAAKTINFGVLYGM  
GMSAHLRSQELAIPYEEAQAFIERYFQSFPKVRAWIEKTLEEGRKRGYVETLFGRRRYVPDLEARVKSVERAERMAFNMPVQGTAADLMKLMVKLFPRLREMARMILLQVHDELLEAPQARAEEVAALAKEAMEKAYPLAVPLEVEVGIGEDWLS  
LSAKG\*

>ScriptII+Theta43

MHHHHHHSSGLVPRGSGMKETAAKFERQHNSPDLGTDDDKMNTINIAKNDFSDELAAIPFNTLADHYGERLAREQLALEHESYMGEARFRKMFERQLKAGEVADNAAKPLITLLPKMIARINDWEEVKAKRGKRPTAFOQLQEIKPEA  
VAYITIKTTLACLTSADNTTVQAVASAIGRAIEDEARFGRIRDLEAKHFKNVVEEQLNKRVGHVYKKAFQMVEADMLSKGLLGGEAWSSWHKEDSIHVGVRCEIMIESTGMVSLSHQRNQAVGVVQDSETIELAPEYEAIASTRAGALAGISPMQ  
PCVVPPKWTGIGGYWANGRRLALVRTHSKKALMRYEDVYMPVYKAINIAQNTAWKINKVLA VANVITKWKHCPVEDIPAIEREELPMKPEDIDMNPEALTAWKRAAAAVYRKDKARKSRRISLEFMQANKFANHKAIWFPNYMDWGR  
VYAVSMFNPOQNDMTKGLLTAKGKPIGKEGYWLLKINGANCAGVDIKVPPPERIKFIEENHENIMACAKSPLENTWAEQDSPFCFLAFCCFEYAVGQHHLGSYNSCLPLAFDGSCSGIOHFSAMLRDEVGGRAVNLLPSETVQDYGIVAKKVNEL  
LQADAINGTDNEVVTVDENTGEISEKVKLGTKLAGQWLAYGVTRSVTKRSVMTLAYGSKEFGFRQQVLEDTIQPAIDSGKGLMFTQPQNAAGYMAKLIWESVSVTVAAVEAMNWLSAAKLLAEVFKDCKTGEILRKRCAVHMVTPDGFVWQ  
EYKKPIQTRLNLMFLGQFRLQPTINTNKDSEIDAHKQESGIAPNFVHSQDGSHLRKTVVVAHEKYGIESFALIHDSTGTIPADAANLFKAVRETMVDTYEESCVDLADFQFADQLHESQLDKMPALPAKGNLNLRDILESDFAFA\*

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